# **INSTRUCTION MANUAL**

# DEWALL

# **24 VOLT CORDLESS TOOLS**

MODELS: DW004 SDS ROTARY HAMMER

DW005 SDS ROTARY HAMMER WITH STOP ROTATION

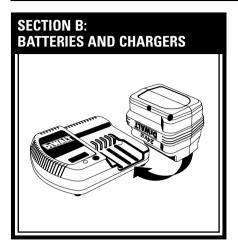
DW006 DRILL / HAMMERDRILL

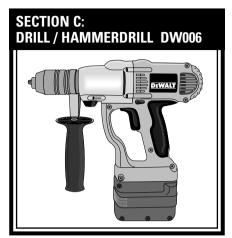
**DW007 CIRCULAR SAW** 

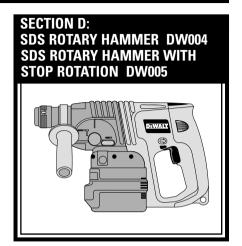
**DW008 RECIPROCATING SAW** 

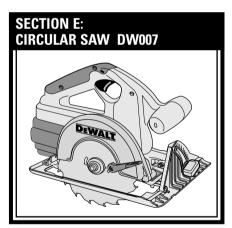
DE0245 / DE0246 BATTERY CHARGER

# **SECTION A: GENERAL SAFETY RULES**











SECTION G: AFTER SALES SERVICE

# **SECTION A: GENERAL SAFETY RULES**

# **SAFETY INSTRUCTIONS**

When using power tools, always observe the safety regulations applicable in your country to reduce the risk of fire, electric shock and personal injury. Read the following safety instructions before attempting to operate these products. Keep these instructions in a safe place.

#### General

- 1. Keep work area clean. Cluttered areas and benches can cause accidents.
- Consider work area environment. Do not expose power tools, including chargers, to high humidity or rain. Keep work area well lit. Do not use power tools, including all cordless tools and chargers, in the presence of flammable liquids or gases.
- Guard against electric shock. Prevent body contact with earthed surfaces (e.g. pipes, radiators, cookers and refrigerators).
- Keep children away. Do not let children come into contact with the tool or extension cord. Keep all people away from the work area.
- Extension cords for outdoor use. When the tool is used outdoors, always use extension cords intended for outdoor use and marked accordingly.
- Store idle tools. When not in use, power tools must be stored in a dry place and locked up securely, out of the reach of children.
- Dress property. Do not wear loose clothing or jewellry. They can be caught in
  moving parts. Preferably wear rubber gloves and non-slip footwear when
  working outdoors. Wear protective hair covering to keep long hair out of the
  way.
- Wear safety goggles. Also use a face or dust mask in case the operations produce dust or flying particles.
- Be aware of maximum sound pressure. Take appropriate measures for the protection of hearing if the sound pressure of 85dB(A) is exceeded.
- Secure workpiece. Use clamps or a vice to hold the workpiece.
   It is safer and it frees both hands to operate the tool.
- 11. Do not overreach. Keep proper footing and balance at all times.
- Avoid unintentional starting. Do not carry the plugged-in tool with a finger on the switch. Be sure that the switch is released when plugging in.

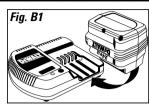
- Stay alert. Watch what you are doing. Use common sense. Do not operate
  the tool when you are tired.
- 14. Disconnect tool. Shut off power and wait for the tool to come to a complete standstill before leaving it unattended. Unplug the tool when not in use, before servicing or changing accessories.
- Remove adjusting keys and wrenches. Always check that adjusting keys and wrenches are removed from the tool before operating the tool.
- 16. Use appropriate tool. Do not force small tools or attachments to do the job of a heavy-duty tool. The tool will do the job better and safer at the rate for which it is intended. The use of any accessories or attachments other than the ones recommended in this instruction manual may induce a risk of personal injury.
- Do not abuse cord. Never carry the tool by its cord or pull the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.
- 18. Maintain tools with care. Keep tools in good condition and clean for better and safer performance. Follow the instructions for maintenance and changing accessories. Inspect tool cords at regular intervals and, if damaged, have them repaired by an authorised DEWALT Repair Centre. Inspect extension cords periodically and replace them if damaged. Keep all controls dry, clean and free from oil and grease.
- 19. Check damaged parts. Before using the tool, carefully check it for damage to ensure it will operate properly and perform its intended function. Check for misalignment and seizure of moving parts, breakage of parts and any other conditions that may affect its operation. Have damaged guards or other defective parts repaired or replaced as instructed. Do not use the tool if switch is defective. Have the switch replaced by an authorised DEWALT Repair Centre.
- Have your tool repaired by an authorised DEWALT Repair Centre.
   This power tool is in accordance with the relevant safety regulations. To avoid danger, electric appliances must only be repaired by qualified technicians.
- These tools are not intended for use by young children or infirm persons
  without supervision. Young children should be supervised to ensure that they do
  not play with these tools.

# SECTION B: BATTERY DE0240 & CHARGER DE0245 & DE0246

### **BATTERY PACKS**

# Important Safety Instructions for Battery Packs.

Your tool uses a 24.0 Volt DEWALT battery pack. When ordering replacement battery packs, be sure to include catalogue number and voltage which is clearly marked on the battery label (i.e., 24V DE0240).



The battery pack is not fully charged out of the kitbox. First read the safety instructions below. Then follow charging notes and procedures.

- Do not incinerate the battery pack even if it is severely damaged or is completely worn out. The battery pack can explode in a fire.
- A small leakage of liquid from the battery pack cells may occur under extreme usage or temperature conditions. This does not indicate a failure. However, if the outer seal is broken and this leakage gets on your skin:
  - a. Wash quickly with soap and water.
  - b. Neutralise with a mild acid such as lemon juice or vinegar.
  - If battery liquid gets into your eyes, flush them with clean water for a minimum of 10 minutes and seek immediate medical attention. (Medical note: The liquid is 25-35% solution of potassium hydroxide.)
- Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, immediately discontinue use and do not recharge.
- Do not carry extra battery packs in aprons, pockets, or tool boxes along with other metal objects. Battery pack could be short circuited causing damage to the battery pack and possibly causing severe burns or fire.
- Charge the battery packs only in DeWALT chargers.
- NOTE: Review and observe all the safety instructions in the charger instruction section of this manual.
- NOTE: The battery cells in your battery pack are the nickel-cadmium (NiCad) type. Cadmium is considered to be a toxic material by the Environmental Protection Agency. Before disposing of damaged or worn out NiCad battery packs, check with your government Environmental Protection Agency to find out about special restrictions on the disposal of these battery packs or return them to a DeWALT authorised repair centre for recycling.

- The battery pack should not be subjected to wet conditions. Where a battery pack has become wet the exterior of the battery pack should be dried with a dry cloth prior to storage or use. If the battery pack has been fully submerged the pack should be taken to a service centre to be opened and dried. The battery pack should not be subjected to any external heating (ie heater or oven) to dry the battery pack. Under no circumstances should a wet or damp battery pack be placed in the battery charger as there is line voltage present at the battery charger terminals.
- The battery pack should be handled with a degree of care and should not be
  dropped or be subjected to severe impacts. A cracked or fractured battery
  case should **NEVER** be placed in a charger to be recharged. In some cases
  high voltage can be measured at the outside of a cracked battery pack and
  electrocution is then a possibility.
- FAILURE TO OBSERVE THE CARE GUIDELINES OUTLINED ABOVE CAN BE CONSIDERED ABUSE AND MAY VOID ANY WARRANTY CLAIM

### Important Information on Battery Packs

The battery cells contained in the battery packs supplied with this tool are NiCad cells and their life will greatly depend on how they are cared for by you the operator. The following details will assist you to obtain the maximum life from your battery packs.

### Temperature

Battery packs should be kept as cool as is practicable whilst in use, charging
and also when in storage. Battery packs should not be left in areas where high
temperatures are experienced, including cars on hot days, small sheds in
summer. or work areas with ambient temperatures above 35°C.

# Usage

- During use, do not overload the tool. If the battery pack is getting hot then
  generally the tool is being overloaded. Overloading can be prevented by
  ensuring the cutting tool is sharp, by ensuring the cutting tool is not too large for
  the powertool and by not forcing the tool into the work piece.
- Where a battery pack has become hot in the tool, remove the battery pack from
  the tool and allow the battery to cool as quickly as possible and then re-charge,
  unless the battery pack is a fan-cooled unit. If your battery pack is a fan cooled
  unit the fastest and best way to cool it down is to immediately put it into the
  matching charger and turn it on.
- Never run a battery down to the point where the tool stops. DeWALT power tool battery packs do not suffer from battery memory effect so there is no

advantage in running the battery flat. At the point where the tool no longer performs the task which is normally performed the battery pack should be removed from the power tool, allowed to cool to room temperature and then placed in the charger to re-charge

### Storage

- Always try and recharge the battery prior to storage, even when the battery will
  only be stored for a few days. If a battery pack is going to be stored for more
  than 2 weeks do not leave it in the battery charger. The proper way to store the
  battery pack for extended periods is to charge the pack for approximately 8
  hours and then place the pack in a cool environment away from the charger.
- Batteries should be charged overnight (or for approximately 8 hours) at least once a week or after every 10-15 charges. This equalises or balances out the battery pack for better runtime and life.
- FAILURE TO OBSERVE THE CARE GUIDELINES OUTLINED ABOVE CAN BE CONSIDERED ABUSE AND MAY VOID ANY WARRANTY CLAIM

### **BATTERY CHARGERS**

# Important Safety Instructions for Battery Chargers

This manual contains important safety and operating instructions.

- Before using charger read all instructions and cautionary markings on (1) charger, (2) battery pack, and (3) product using battery pack.
- DANGER: Line voltage present at charging terminals. Do not probe with conductive objects. Danger of electric shock or electrocution.
- DANGER: If battery case is cracked or damaged, do not insert into charger.
   Danger of electric shock or electrocution.
- The charger and battery pack are specifically designed to work together. DO NOT attempt to charge the battery pack with any chargers other than the ones in this manual.
- Do not expose charger to high humidity, rain or snow.
- These chargers are not intended for any uses other than charging DEWALT rechargeable batteries. Any other uses may result in risk of fire, electric shock and electrocution.
- To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
- Make sure cord is located so that it will not be stepped on, tripped over, or

- otherwise subjected to damage or stress.
- An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in risk of fire, electric shock or electrocution.
- The charger is ventilated through slots in the top and the bottom of the housing. Do not place any object on top of the charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat. Place the charger in a position away from any heat source. In the case of the DE0246, which is fan assisted, all ventilation slots must be kept clear.
- Do not operate charger with damaged cord or plug have them replaced immediately at an authorised DEWALT Service Centre.
- Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to an authorised DEWALT Service Centre
- Do not disassemble charger; take it to an authorised DEWALT Service Centre when service or repair is required. Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- To reduce risk of electric shock, unplug charger from outlet before att-emptying any cleaning. Removing the battery pack will not reduce this risk.
- NEVER attempt to connect two chargers together.
- **DO NOT** store or use the tool or battery pack in locations where the temperature may reach or exceed 40°C (105°F) (such as outside sheds or metal buildings in summer).
- The charger is designed to operate on standard household electrical power, 240V AC 50Hz.. Do not attempt to use it on any other voltage. Check to ensure mains voltage agrees with voltage on plate of charger.
- Replacement of the supply cord. If the supply cord is damaged, it must be replaced by the manufacturer or an authorised DEWALT Service Centre in order to avoid a hazard.
- This appliance (charger and tool) is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with this
  appliance (charger and tool).

# THE CHARGER SUPPLIED

Your 24V tool is supplied with either a DE0245 or a DE0246 24 volt battery charger. Both chargers operate in a similar manner but are fitted with a number of different

features. The DE0245 charger is fitted with a manual tune-up mode whereas the DE0246 is fitted with an automatic tune-up mode. Also, the DE0246 charger is fitted with a cooling fan to assist the cooling of the battery cells when the battery pack is fitted to the charger.

Your charger is designed to use standard 240 volt AC, 50 Hz power. Do not use DC or any other voltage. Charging time is approximately one hour.

### Charging Procedure (DE0245 & DE0246)

The DE0246 charger is fitted with an internal cooling fan that provides rapid cooling of the cells in the battery pack. The fan operation is automatic and will operate for a short time when the charger is initially plugged in and turned on. The fan will also operate while the charging process is underway when a battery is inserted.

This feature is of great benefit where the battery pack has become hot during heavy applications in the tool and the pack is inserted to the charger to both cool the pack and either partially or fully charge the pack.

To fully optimise both the life and performance of the battery pack, remove the battery pack from the tool as soon as possible and insert into the charger so as to allow the internal fan to cool the individual cells.

**WARNING:** On the DE0246, the fan may blow debris from vent area at any time. Keep your face and eyes well above the outlet vent area. Depending on the environment where the charger is being used it may be necessary to wear eye protection.

- Plug the charger into an appropriate outlet.
   (On the DE0246 the fan will operate initially for up to 30 sec)
- Insert the battery pack into the charger (refer figure B1). Be sure the pack is fully seated in the charger. The red (charging) light will blink continuously indicating that the charging process has started. On the DE0246 the fan will operate and remain "On" during the main charging cycle.
- The completion of charge will be indicated by the red light remaining ON continuously. The pack is fully charged and may be used at this time or left in the charger.

#### Usina Tune-Up mode

Using Tune-Up mode will equalise or balance the individual cells in the battery pack at its peak capacity. This cycle takes up to 8 hours to complete. Battery packs should be tuned up weekly or after 10 to 15 charge/discharge cycles or whenever the pack no longer delivers the same amount of work.

Both the DE0245 and the DE0246 are fitted with a Tune-Up mode feature.

The DE0245 charger is fitted with a manual Tune-Up mode cycle which is initiated by the operator pushing the small button at the front of the charger marked "Tune-Up Mode."

The DE0246 is fitted with an auto Tune-Up mode cycle where at the completion of the normal charging cycle if the battery is left in the charger, the tune up mode cycle begins.

### For DE0245 Manual Tune-Up

- To tune up your battery pack, place the battery in the charger as usual. The red light will blink continuously indicating that the charge cycle has started.
- The Tune-Up button may be pressed at any time after the charge has started.
   The red light will stop blinking momentarily, blink 3 times and then resume blinking continuously. The charger is now giving your batteries a tune-up.
- When the charge cycle has completed, the light will stay on continuously. The pack is fully charged and may be used at this time or left in the charger.
- 4. If you select Tune-Up and then change your mind, remove the battery from the charger. After 5 seconds, insert the battery into the charger. Then normal charge cycle will commence. To tune up your battery pack, place the battery in the charger as usual. The red light will blink continuously indicating the charge cycle has started.

### For DE0246 Auto Tune-Up

To tune up your battery pack, place the battery in the charger as usual. The red light will blink continuously indicating that the charge cycle has started.

When the battery is fully charged the red light will remain on, and the tune up cycle will begin. For the full tune up process, leave the battery pack in the charger for a further 7 - 8 hours. Please note that the battery pack can be used during the tune up cycle but when the battery is replaced in the charger, the charging cycle will start again followed by the tune up cycle where the battery should stay for the full 7 - 8 hours.

During the tune up cycle the red indicator light will remain "ON" continuously.

# **CHARGE INDICATORS**

### HOT/ COLD PACK DELAY:

When the charger detects a battery that is excessively hot or excessively cold, it automatically starts a Hot/Cold Pack Delay, suspending charging until the battery temperature has normalised. After this happens, the charger automatically switches to the Pack Charging mode. This feature ensures maximum battery life. The red light

flashes long, then short while in the Hot/ Cold Pack Delay mode.

#### REPLACE PACK:

These chargers are designed to detect certain problems that can arise with battery packs which would be indicated by the red light flashing at a fast rate. If this occurs, re-insert battery pack. If problem persists, try a different battery pack to determine if the charger is OK. If the new battery charges correctly, then the original pack is defective and should be returned to a service centre for recycling. If the new battery pack gives the same trouble indication as the original, have the charger tested at an Authorised Service Centre.

### PROBLEM POWER LINE:

When these chargers are used with some portable power sources such as generators or sources that convert DC to AC, the chargers may temporarily suspend operation, flashing the red light with two fast blinks followed by a pause. This indicates the power source is out of limits. Your power supply may need service.

### LEAVING THE BATTERY PACK IN THE CHARGER

The charger and battery pack can be left connected with the red light glowing indefinitely. The charger will keep the battery pack fresh and fully charged.

**NOTE:** A battery pack will slowly lose its charge when kept out of the charger. If the battery pack has not been kept on maintenance charge, it may need to be recharged before use. A battery pack may also slowly lose its charge if left in a charger that is not plugged into an appropriate AC source.

# **IMPORTANT CHARGING NOTES**

- 1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 18°C and 24°C (65°-75°F). DO NOT charge the battery pack in an air temperature below +4.5°C (+40°F). This is important and will prevent serious damage to the battery pack. It is recommended the battery pack is cycled on the tune-up mode and the battery is left on charge for approximately 8 hours on a weekly basis or every 10-15 charges.
- The charger and battery pack may become warm to the touch while charging. This is a normal condition, and does not indicate a problem.
- If the battery pack does not charge properly (1) Check power at receptacle by
  plugging in a lamp or other appliance. (2) Check to see if receptacle is
  connected to a light switch which turns power off when you turn out the lights.
  (3) Move charger and battery pack to a location where the surrounding air
  temperature is approximately 18° 24°C (65°F 75°F). (4) If charging problems

- persist, take or send the tool, battery pack and charger to your local service centre.
- 4. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously.
  DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse effect on the battery pack. DO NOT FULLY DISCHARGE THE BATTERY PACK AS THIS CAN CAUSE SEVERE DAMAGE TO THE BATTERY PACK.
- DEWALT battery packs that are labelled "NiMH" should only be used with chargers labelled "NiMH" or NiCd/ NiMH".
- 6. Under certain conditions, with the charger plugged into the power supply, the exposed charging contacts inside the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminium foil, or any build up of metallic particles should be kept away from charger activities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug the charger before attempting to clean.
- 7. Do not immerse charger in water or any other liquid.
- 8. Air Cooled batteries and chargers. Battery packs with the air cooling feature should be removed from the tool and placed into the DE0246 charger as soon as practical to rapidly cool the battery cells within the charger. This will assist greatly to optimise both battery life and performance.
- WARNING: Do not allow any liquid to get inside the charger. Electric shock
  may result. To facilitate the cooling of the battery pack after use, avoid placing
  the battery pack or charger in a warm environment such as a metal shed, or an
  uninsulated trailer.
- CAUTION: Never attempt to open the battery pack for any reason.
   If the plastic housing of the battery pack breaks or cracks, return to an authorised DeWALT Service Centre for recycling.

# **SECTION C: 13MM CORDLESS HAMMER DRILL**



### **Additional Safety Rules for Hammer Drills**

Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a 'live' wire will make exposed metal parts of the tool 'live' and shock the operator.

Wear safety goggles or other eye protection. Hammering and drilling operations cause chips to fly. Flying particles can cause permanent eye damage.

Wear ear protectors when hammering for extended periods of time. Temporary hearing loss or serious ear drum damage may result from high sound levels generated by hammer drilling.

Always use the side handle supplied with the tool. Keep a firm grip on the tool at all times. Do not attempt to operate this tool without holding it with both hands.

Do not overreach while operating the tool. Maintain a balanced working stance at all times. When necessary, use only properly positioned, safe, platforms and scaffolding. **WORK SAFE**.

Hammer bits and tools get hot during operation. Wear gloves when touching them.

# Installing and Removing the Battery Pack (Fig. C2)

NOTE: Make sure your battery pack is fully charged. To install the battery pack into the tool, lock the trigger switch (See Forward/Reverse Control Button), align the base of the tool with notches inside the tool's handle and slide the battery pack firmly into the handle until you hear the lock snap into place.

To remove the battery pack from the tool, lock the trigger switch, slide the release button (A) away from the battery pack (B) and the battery may be removed from the tool handle. Insert it into the charger as described in the charging section of this manual.

# **CAUTION: DO NOT TOUCH ANY METAL**

PARTS OF THE TOOL when drilling or driving into walls, floors or wherever live electrical wires

may be encountered! Hold the tool only by insulated grasping surfaces to prevent electric shock if you drill or drive into a live wire.

**WARNING:** Use of this tool can generate dust containing chemicals known to cause cancer, birth defects or other reproductive harm. Use appropriate respiratory protection.

### Motor

Your DEWALT tool is powered by a DEWALT-built motor. Be sure your power supply battery agrees with the nameplate markings.

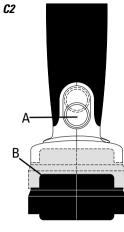
All DEWALT tools are factory tested; if this tool does not operate, check your battery pack.

# Side Handle Fig. C1 (A)

**CAUTION:** Always use side handle when provided and hold hammerdrill with both hands. A side handle is supplied with this hammerdrill. It clamps to the front of the gear case as shown in Figure C1 and can be rotated 360° to permit right or left hand

### Variable Speed Switch Fig. C1 (B)

To turn the tool on, squeeze the trigger switch. To turn the tool off, release the trigger switch. Your tool is equipped with a brake. The chuck will stop as soon as the trigger switch is fully released.



The variable speed switch enables you to select the best speed for a particular application. The farther you squeeze the trigger, the faster the tool will operate. Use lower speeds for starting holes without a centrepunch, drilling in metals or plastics, driving screws and drilling ceramics. For maximum tool life, use variable speed only for starting holes or fasteners.

**NOTE:** Continuous use in variable speed range is not recommended. It may damage the switch and should be avoided.

### Forward/Reverse Control Button Fig. C1 (C)

A forward/reverse control button determines the direction of chuck rotation and also serves as a lock off button. To select forward rotation, release the trigger switch and depress the forward/reverse control button on the right side of the tool. To select reverse, depress the forward/reverse control button on the right side of the tool. The centre position of the control button locks the tool in the off position. When changing the position of the control button, be sure the trigger is released. **NOTE**: The first time the tool is run after changing the direction of rotation, you may hear a click on start up. This is normal and does not indicate a problem.

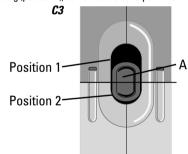
### Hammer/Drill Selector Fig. C1 (D)

To switch the tool from the drilling mode to the hammering mode (or vice-versa) rotate the knob to the applicable symbol shown. For straight drilling, rotate to the drill symbol. For hammering, rotate to the hammer symbol (As shown in figure C1 (D)). **NOTE:** The selector must be in either drill, or hammer/drill mode at all times. These are no operable positions between the two.

### Dual Range Gearing Fig. C3

The dual range feature of your drill allows you to shift gears for greater versatility. To select the low speed, high torque setting (position 1), turn the tool off and permit to

stop. Slide the button forward towards the chuck. To select the high speed, low torque setting (position 2), turn the tool off and permit to stop. Slide the button back (away from chuck).



**NOTE:** Do not change gears when the tool is running. If you are having trouble shifting gears, make sure that the dual range gear button is either completely pushed forward or completely pushed back.

# **OPERATION**

### DRILLING

- Always lock the trigger switch and remove the battery pack before attaching or changing bits or accessories.
- Use sharp drill bits only. For WOOD, use the low speed setting and twist drill bits, spade bits, power auger bits, or hole saws. For METAL, use the low speed setting and steel twist drill bits or hole saws. For MASONRY, such as brick, cement, cinder block, etc., use high speed setting and carbide-tipped bits rated for percussion drilling.
- Be sure the material to be drilled is anchored or clamped firmly. If drilling thin
  material, use a wood "back-up" block to prevent damage to the material.
- Always apply pressure in a straight line with the bit. Use enough pressure to keep drill biting, but do not push hard enough to stall the motor or deflect the bit.
- 5. Hold tool firmly to control the twisting action of the drill.
- IF DRILL STALLS, it is usually because it is being overloaded or improperly used. RELEASE TRIGGER IMMEDIATELY, remove drill bit from work, and determine cause of stalling. DO NOT CLICK TRIGGER OFF AND ON IN AN ATTEMPT TO START A STALLED DRILL – THIS CAN DAMAGE THE DRILL.
- To minimise the stalling or breaking through the material, reduce pressure on drill
  and ease the bit through the last fractional part of the material.
- Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.
- With variable speed drills there is no need to centre punch the point to be drilled. Use a slow speed to start the hole and accelerate by squeezing the trigger harder when the hole is deep enough to drill without the bit skipping out.

*C6* 

### **DRILLING IN METAL**

USE ONLY in the 'low speed' gear range. Start drilling with slow speed and increase to full power while applying firm pressure on the tool. A smooth even flow of metal chips indicates the proper drilling rate. Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry.

**NOTE:** Large (8 mm (5/16'') to 13 mm (1/2'')) holes in steel can be made easier if a pilot hole (4 mm (5/32'') to 5 mm (3/16'')) is drilled first.

### **DRILLING IN WOOD**

USE ONLY in the 'low speed' gear range. Start drilling with slow speed and increase to full power while applying firm pressure on the tool. Holes in wood can be made with the same twist drills used for metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. Work that is apt to splinter should be backed up with a block of wood.

### DRILLING IN MASONRY

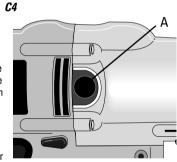
Use only in the 'high speed' gear range. When drilling in masonry, use carbide tipped bits rated for percussion drilling and be certain that the bit is sharp. Ensure that the hammer mode is selected. Use a constant and firm force on the tool to drill most effectively. A smooth, even flow of dust indicates the proper drilling rate.

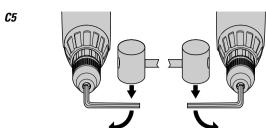
# **KEYLESS CHUCK**

### SPINDLE LOCK

Open chuck jaws by turning the collar with your fingers and inserting the shank of the bit about 19 mm (3/4") into the chuck. Tighten the follower clockwise while depressing the spindle lock button (Fig. C4 (A)) on the right side of the tool housing. To release a bit, turn the collar counter-clockwise while depressing the spindle lock button.

**CAUTION:** Do not depress lock button while operating drill or while the chuck is moving. Always lock off trigger switch when changing accessories.





### Chuck Removal

# Always wear eye protection.

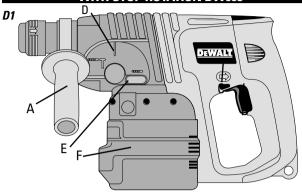
Slide the dual range gear button to position 1. Tighten the chuck around the shorter end of a hex key (not supplied) of 10mm (3/8") or greater size. Using a wooden mallet or similar object, strike the longer end in the clockwise direction, as shown in Fig. C5. This will loosen the screw inside the chuck.

Open chuck jaws fully, insert screwdriver (or Torx tool if required) into front of chuck between jaws to engage screw head. Remove screw by turning clockwise (left-hand thread). Place hex key in chuck and tighten. Using a wooden mallet or similar object, strike key sharply in the counterclockwise direction. This will loosen the chuck so that it can be unscrewed by hand.

### **Chuck Installation**

Screw the chuck on by hand as far as it will go and insert screw (LH thread). Tighten the chuck around the shorter end of a 10 mm (3/8) or larger hex key (not supplied) strike the longer end in the clockwise direction with a wooden mallet, as shown in Fig C6. Tighten the screw by turning in a counterclockwise direction.

# SECTION D: 22MM CORDLESS ROTARY HAMMER DW004 22MM CORDLESS ROTARY HAMMER WITH STOP ROTATION DW005



# ADDITIONAL SAFETY RULES FOR ROTARY HAMMERS

- Hold tool by insulated gripping surfaces when performing an operation where
  the cutting tool may contact hidden wiring or its own cord. Contact with a 'live'
  wire will make exposed metal parts of the tool 'live' and shock the operator.
- Wear safety goggles or other eye protection. Hammering and drilling operations
  cause chips to fly. Flying particles can cause permanent eye damage.
- Wear ear protectors when hammering for extended periods of time. Temporary hearing loss or serious ear drum damage may result from the high sound levels generated by hammer drilling.
- Always use the side handle supplied with the tool. Keep a firm grip on the tool at all times. Do not attempt to operate this tool without holding it with both hands.
- Do not overreach while operating the tool. Maintain a balanced working stance at all times. When necessary, use only properly positioned, safe, platforms and scaffolding. WORK SAFE.
- Hammer bits and tools get hot during operation. Wear gloves when touching them.
- CAUTION: DO NOT TOUCH ANY METAL PARTS OF THE TOOL
  when drilling or driving into walls, floors or wherever live electrical wires may
  be encountered! Hold the tool only by insulated grasping surfaces to prevent

electric shock if you drill or drive into a live wire.

#### Motor

Your DEWALT tool is powered by a DEWALT-built motor. Be sure your power supply battery agrees with the nameplate markings.

All DEWALT tools are factory tested; if this tool does not operate, check your battery nack

# Installing and Removing the Battery Pack (Fig. D1)

NOTE: Make sure your battery pack is fully charged.

**To install the battery pack** into the tool, centre the lock button (Pic D1 (C)) to disable the trigger switch (See section Forward and Reverse button), align the front of the battery with the notches inside the tool's body and slide the battery pack firmly into place until you hear the lock slide into place.

To remove the battery pack from the tool, depress the release buttons (E) on both sides, remove the battery pack (F). Insert it into the charger as described in the charger section of the manual.

### Side Handle (Fig. D1 (A))

**CAUTION:** Always use side handle and hold rotary hammer with both hands. It clamps to the front of the gear case as shown in Figure D1 and can be rotated 360° to permit right or left hand use.

### Variable Speed Switch (Fig. D1 (B))

To turn the tool on, squeeze the trigger switch. To turn the tool off, release the trigger switch. Your tool is equipped with a brake. The chuck will stop as soon as the trigger switch is fully released.

The variable speed switch enables you to select the best speed for a particular application. The farther you squeeze the trigger, the faster the tool will operate. Use lower speeds for starting holes without a centrepunch, drilling in metals or plastics, driving screws and drilling ceramics. For maximum tool life, use variable speed only for starting holes or fasteners.

**NOTE:** Continuous use in variable speed range is not recommended. It may damage the switch and should be avoided.

# Forward/Reverse Control Button (Fig D1 (C))

A forward/reverse control button determines the direction of rotation and also serves as a lock off button. To select forward rotation, release the trigger switch and depress the forward/reverse control button on the right side of the tool. To select reverse, depress the forward/reverse control button on the left side of the tool. The centre position of the control button locks the tool in the off position. When changing the position of the control button, be sure the trigger is released and the tool has

stopped.

**NOTE:** The first time the tool is run after changing the direction of rotation, you may hear a click on start up. This is normal and does not indicate a problem.

# DW004 Hammer Drilling/Rotary Drilling Selector (Fig. D1 (D) D2)

To switch the tool from the drilling mode to the hammering mode (or vice-versa) rotate the lever to the applicable symbol shown. For straight drilling, align the lever

D2 DW004

with the drill bit symbol (B) as shown. For hammer, align the lever with the hammerdrill symbol (A). **NOTE:** The selector must be in either drill, or hammerdrill mode at all times. There are no operable positions between the two.

# DW005 Hammer Drilling/Rotary Drilling/Hammer Only with Stop Rotation Selector (Fig. D1 (D) D3)

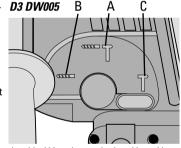
For hammer drilling and rotary drilling

follow the instructions above for the DW004. For hammer only with stop rotation for light chipping, chiselling and light demolition work, rotate the lever to hammer

symbol (C). When using the DW005 in hammer position with stop rotation for light demolition work, the forward/reverse selector should be in the **Forward position**.

# To Rotate or Align the Chisel Bit (DW005 only)

If it is necessary to rotate the chisel bit to obtain a more comfortable working position, position the forward/reverse control button to the centre lock-off position. Move the drill mode selector



lever to the hammerdrill position. Rotate the chisel bit to the required position with your hand. Move the drill mode selector back to the hammer position and begin chiselling.

# OPERATION DRILLING

changing bits or accessories.

Use sharp drill bits only. For WOOD, use the low speed setting and twist drill
bits, spade bits, power auger bits, or hole saws. For METAL, use the low speed
setting and steel twist drill bits or hole saws. For MASONRY, such as brick,
cement, cinder block, etc., use carbide-tipped bits rated for percussion drilling.

1. Always lock the trigger switch and remove the battery pack before attaching or

- Be sure the material to be drilled is anchored or clamped firmly. If drilling thin material, use a wood 'back-up' block to prevent damage to the material.
- Always apply pressure in a straight line with the bit. Use enough pressure to keep drill biting, but do not push hard enough to stall the motor or deflect the bit.
- 5. Hold tool firmly to control the twisting action of the drill.
- IF DRILL STALLS, it is usually because it is being overloaded or improperly used. RELEASE TRIGGER IMMEDIATELY, remove drill bit from work, and determine cause of stalling. DO NOT CLICK TRIGGER OFF AND ON IN AN ATTEMPT TO START A STALLED DRILL – THIS CAN DAMAGE THE DRILL.
- To minimise the stalling or breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the material.
- Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.
- With variable speed drills there is no need to centre punch the point to be drilled. Use a slow speed to start the hole and accelerate by squeezing the trigger harder when the hole is deep enough to drill without the bit skipping out.

#### DRILLING IN METAL

Start drilling with slow speed and increase to full power while applying firm pressure on the tool. A smooth even flow of metal chips indicates the proper drilling rate. Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry.

**NOTE:** Large (8mm (5/16") to 12mm (1/2")) holes in steel can be made easier if a pilot hole (4mm (5/32") to 5mm (3/16")) is drilled first.

#### DRILLING IN WOOD

Start drilling with slow speed and increase to full power while applying firm pressure on the tool. Holes in wood can be made with the same twist drills used for metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. Work that is apt to splinter should be backed up with a block of wood.

### DRILLING IN MASONRY

12

When drilling in masonry, use carbide tipped bits rated for percussion drilling. Be certain that the bit is sharp. Ensure that the hammer mode is selected. Use a constant and firm force on the tool to drill most effectively. A smooth, even flow of dust indicates the proper drilling rate.

# **Chipping and Chiselling**

Select the hammering only mode. Insert and SDS-plus® chisel and check that it is properly locked. Adjust the side handle as required. Proceed as described for hammer drilling. It may be necessary to briefly run the motor after having changed from chiselling to rotary modes in order to align the gears..

**NOTE:** Select Forward direction when chipping and chiselling.

### SDS Chuck (Fig. D4)

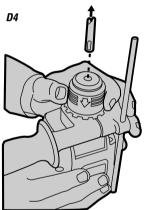
To insert bit, insert shank of bit about 19mm (3/4") into chuck and twist the bit until it clicks into place. The bit will be securely held.

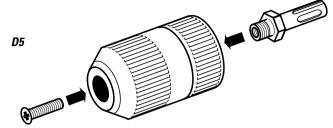
To release bit, pull the collar back and remove the bit.

# 3 Jaw Chuck Adaptor (FIG. D5)

A chuck adaptor is available for the DW004 rotary hammer drill. The adaptor enables a standard keyless or keyed chuck to be fitted so straight shank drill bits can be

used. The chuck adaptor should not be used in the hammer or hammerdrill position. This adaptor is designed to function with non-hammer applications.





To fit the adaptor to the drill, follow the section 'SDS Chuck, (Fig. D4)'.

To fit the chuck to adaptor, screw the chuck onto the adaptor in a clockwise direction and ensure the chuck is tight on the adaptor. Open the jaws of the chuck fully and fit the small lock screw down the centre of the chuck (note left hand thread). Ensure the lock screw is tight by rotating the screw in an anti-clockwise direction. (FIG. D5)

To remove the chuck, reverse the above procedure.

**NOTE:** On models DW004K2C and DW005K2C, both the chuck adaptor and 3 jaw chuck are supplied with the drill. For other models, the chuck adaptor and 3 jaw chuck are available as accessories.

### **ACCESSORIES**

Recommended accessories for use with your tool are available at extra cost from your distributor or local service centre.

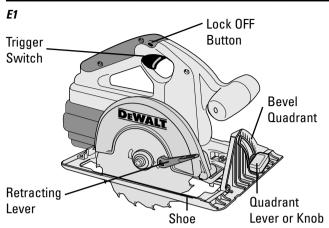
**CAUTION:** The use of any non-recommended accessory may be hazardous.

# MAXIMUM RECOMMENDED CAPACITIES (DW004)

R.P.M. 0-1,150
B.P.M. 0-5,800
BITS, METAL DRILLING 13mm (1/2")
WOOD, FLAT BORING 38mm (1 1/2")

BITS, MASONRY DRILLING 22mm (7/8") bit –
Concrete, brick, block

# **SECTION E: CORDLESS CIRCULAR SAW DW007**



# ADDITIONAL SAFETY INSTRUCTIONS FOR CIRCULAR SAWS

**DANGER!** Keep hands away from cutting area and blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.

- Keep your body positioned to either side of the saw blade, but not in line with the saw blade. KICKBACK could cause the saw to jump backwards. (See 'Causes and Operator Prevention of Kickback.')
- Do not reach underneath the work. The guard can not protect you from the blade below the work.
- Check lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, the lower guard may be bent. Raise the lower guard with the Retracting Handle and make sure it moves freely and does not touch the blade or any other part, at all angles and depths of cut.
- · Check the operation and condition of the lower guard spring. If the guard and

- the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- Lower guard should be retracted manually only for special cuts such as 'Pocket Cuts' and 'Compound Cuts.' Raise lower guard by Retracting Handle. As soon as blade enters the material, lower guard must be released. For all other sawing, the lower guard should operate automatically.
- Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.
- NEVER hold piece being cut in your hands or across your leg. It is important to support the work properly to minimise body exposure, blade binding, or loss of control.
- Hold tool by insulated gripping surfaces when performing an operation where
  the cutting tool may contact hidden wiring. Contact with a 'live' wire will also
  make exposed metal parts of the tool 'live' and shock the operator.
- When ripping, always use a rip fence or straight edge guide. This improves the
  accuracy of cut and reduces the chance for blade binding.
- Always use blades with correct size and shape (diamond vs. round) arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- Never use damaged or incorrect blade washers or bolts. The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

# Causes and Operator Prevention of Kickback

- KICKBACK is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.
- When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.
- If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.
- KICKBACK is the result of tool misuse and/or incorrect operating procedures
  or conditions and can be avoided by taking proper precautions as given below:

- Maintain a firm grip with both hands on the saw and position your body and arm to allow you to resist KICKBACK forces. KICKBACK forces can be controlled by the operator, if proper precautions are taken.
- When blade is binding, or when interrupting a cut for any reason, release the
  trigger and hold the saw motionless in the material until the blade comes to a
  complete stop. Never attempt to remove the saw from the work or pull the saw
  backward while the blade is in motion or KICKBACK may occur. Investigate
  and take corrective actions to eliminate the cause of blade binding.
- When restarting a saw in the workpiece, centre the saw blade in the kerf and check that the saw teeth are not engaged into the material. If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.
- Support large panels to minimise the risk of blade pinching and KICKBACK.
   Large panels tend to sag under their own weight. Support must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- Do not use dull or damaged blades. Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding, and KICKBACK.
- Blade depth and bevel adjustment locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and KICKBACK.
- Use extra caution when making a 'Pocket Cut' into existing walls or other blind areas.
   The protruding blade may cut objects that can cause KICKBACK.

# Additional Specific Warnings

- WARNING: Use of this tool can generate dust containing chemicals known to cause cancer, birth defects or other reproductive harm. Use appropriate respiratory protection.
- AVOID cutting NAILS. Inspect for and remove all nails from lumber before cutting.
- CAUTION: Some wood contains preservatives such as copper chromium arsenate (CCA) which can be toxic. When cutting these materials extra care should be taken to avoid inhalation and minimise skin contact.

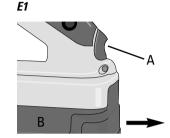
### Installing and Removing the Battery Pack (Fig. E1)

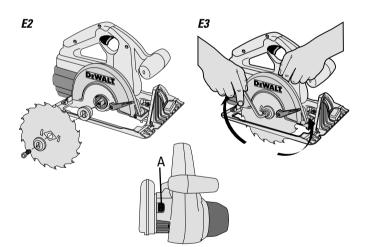
**NOTE:** Make sure your battery pack is fully charged. To install the battery pack into the tool handle, align the top of the battery pack with the notches inside the tool's handle and slide the battery pack firmly into the handle until you hear the lock snap into place.

To remove the battery pack from the tool, slide the release button (A) away from the battery pack (B) and the battery may be removed from the tool handle. Insert it into the charger as described in the charger section of this manual.

# Changing Blades (Fig. E2 & E3)

- 1. TURN OFF TOOL AND REMOVE BATTERY PACK.
- To attach blade, retract lower blade guard and place blade over the spindle and against the inner clamp washer. Place outer clamp washer against the blade. (Blade must be installed with the printed side out. Teeth at the bottom of the blade should be facing forward.)





- Thread on blade clamping screw firmly by hand to hold washer in position. (Screw has right hand threads and must be turned clockwise to tighten.)
- Lightly depress the blade lock (A) while turning the spindle until the blade stops rotating.
- 5. Tighten blade clamping screw (clockwise) firmly with the blade wrench.
- To remove blade, turn off the tool and remove the battery pack. Engage the blade lock (Pic E2 (A)) and unscrew the blade clamping screw by turning it counterclockwise with the blade wrench.
- 7. Retract the lower guard and lift blade off spindle.

**NOTE:** Never engage the blade lock while saw is running, or engage in an effort to stop the tool. Never turn the tool on while the blade lock is engaged. Serious damage to your saw will result.

#### **Blades**

A dull blade will cause slow, inefficient cutting, overload on the saw motor, excessive splintering, and could increase the possibility of kickback. Recommended blades for use with your tool are available at extra cost from your local retailer or DEWALT Service Centre.

For information or assistance regarding blades, please call Australia 1 800 816 900 New Zealand 09 579 7600.

DEWALT offer a range of thin kerf circular saw blades specifically designed for cordless 6 1/2" circular saws.

**CAUTION:** Do not use abrasive discs or blades for cutting ferrous (steel) materials, class or tile.

**WARNING:** To minimise the risk of eye injury, always use eye protection. Carbide is a hard but brittle material. Foreign objects in the work piece such as wire or nails can cause tips to crack or break. Only operate tool when proper saw blade guard is in place. Mount blade securely in proper rotation before using, and always use a clean. sharp blade.

It is a good practice to keep extra blades on hand so that sharp blades are available while the dull ones are being sharpened (See 'SAWS-SHARPENING' in the Yellow Pages). In fact, many lower priced blades can be replaced with new ones at very little cost over the sharpening price.

Hardened gum on the blade will slow down the cutting. This gum can best be removed with kerosene, turpentine or oven cleaner.

# Cutting Depth Adjustment (Fig. E4 (a) (b) (c) & E5)

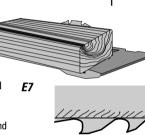
- 1. TURN OFF TOOL AND REMOVE BATTERY PACK.
- Hold the saw firmly and loosen (counterclockwise) the depth adjustment lever (A) and move shoe (B) up or down, to obtain the desired depth of cut.
- Make sure the depth adjustment lever have been retightened (clockwise) before operating the saw.

For the most efficient cutting action, set the depth adjustment so that one tooth A of the blade will project below the material to be cut. (Fig. E5) This distance is from the tip of the tooth (T) to the bottom of the gullet (G) in front of it. This keeps blade friction at a minimum, removes sawdust from the cut, results in cooler, faster sawing and reduces the

A method for checking for correct cutting depth is shown in Fig. E6.
Lay a piece of the material along the side of the blade, as shown, and observe how much tooth projects beyond the material.

chance of kickback.

**NOTE:** When using a carbide tipped blade, make an exception to the above procedure and allow a full tooth to project below the material, as shown in Figure E7.



**E5** 

# Bevel Angle Adjustment (Fig. E8)

### TURN OFF THE SAW AND REMOVE THE BATTERY PACK.

The full range of the Bevel Adjustment is from 0 TO 45 DEGREES. The quadrant is graduated in increments of 5 degrees.

On the front of the saw is a bevel angle adjustment mechanism consisting of a calibrated quadrant and a lever or knob. To set the saw for a bevel cut;

# 1. TURN OFF THE TOOL AND REMOVE THE BATTERY PACK.

- Loosen (counterclockwise) the quadrant knob and tilt shoe to the desired angle by aligning the pointer with the desired angle mark.
- 3. Retighten knob firmly (clockwise).

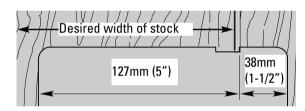
### Adjusting for 90° Cuts (Fig. E9)

- 1. TURN OFF THE TOOL AND REMOVE THE BATTERY PACK.
- 2. Adjust the saw to 0° bevel.
- 3. Retract blade guard. Place saw on blade side.
- Loosen bevel adjustment knob. Place a square against the blade and shoe to adjust the 90° setting.
- 5. Run in the adjustment set screw (A) so that the shoe will stop at the proper angle.



The front of the saw shoe has a kerf indicator





E9

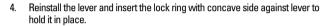
(Figure E10) for vertical and bevel cutting. This indicator enables you to guide the saw along cutting lines pencilled on the material being cut. At  $0^{\circ}$  bevel, the kerf indicator lines up with the right (outer) side of the saw blade. At  $45^{\circ}$  bevel the kerf indicator lines up with the left (inner) side of the saw blade. Guide along the pencilled cutting line so that the kerf falls into the waste or surplus material. Figure E10 shows the dimensions of the shoe. The right dimension 38mm (1-1/2").

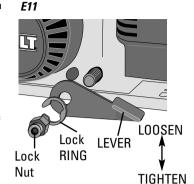
Adjusting Depth Adjustment Lever (Fig. E11)

It may be desirable to adjust the Depth Adjustment Lever. (It will sometimes swing below the bottom of the shoe before tightening or loosening completely.) To adjust lever, follow the steps below.

### TURN OFF THE TOOL AND REMOVE THE BATTERY PACK.

- Using a small screwdriver, pry off the lock ring.
- Remove the lever and rotate it in the desired direction about 1/8 revolution. (More or less as necessary.)

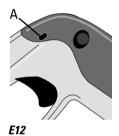




### **Operation Switch**

Release lock-off by pressing button Fig. E12 (A). Pull the trigger switch to turn the motor ON. Releasing the trigger turns the motor OFF. Releasing the trigger also automatically actuates lock off button.

**NOTE:** This tool has no provision to lock the switch in the ON position, and should never be locked in the ON position by any other means.



# Workpiece Support

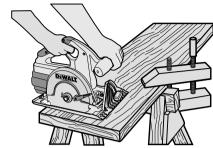
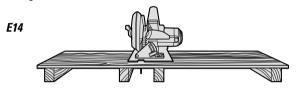


Figure E13 shows proper sawing position. Note that hands are kept away from cutting area.



**WARNING:** It is important to support the work properly and to hold the saw firmly to prevent loss of control which could cause personal injury.



ALWAYS DISCONNECT BATTERY PACK FROM SAW BEFORE MAKING ANY ADJUSTMENTS! Place the work with its 'good' side – the one on which appearance is most important – down. The saw cuts upward, so any splintering will be on the work face that is up when you saw it.

### 1. IMPROPER WORKPIECE SUPPORT

- A. Sagging or improper lifting of the cut off piece causing pinching of the blade.
- Cutting through material supported at the outer ends only (see Figure E15). As the material weakens it sages, closing down the kerf and pinching the blade.
- C. Cutting off a cantilevered or overhanging piece of material from the bottom up in a vertical direction. The falling cut off piece can pinch the blade.
- D. Cutting off long narrow strips (as in ripping). The cut off strip can sag or twist closing the kerf and pinching the blade.
- E. Snagging the lower guard on a surface below the material being cut momentarily reducing operator control. The saw can lift partially out of the cut increasing the chance of blade twist.

### 2. IMPROPER DEPTH OF CUT SETTING ON SAW

Using the saw with an excessive depth of cut setting increases loading on the unit and susceptibility to twisting of the blade in the kerf. It also increases the surface area of the blade available for pinching under conditions of kerf close down.

# 3. BLADE TWISTING (MISALIGNMENT IN CUT)

- Pushing harder to cut through a knot, a nail, or a hard grain area can cause the blade to twist.
- B. Trying to turn the saw in the cut (trying to get back on the marked line) can cause blade twist.
- C. Extended reach or operating saw with poor body control (out of balance), can result in twisting the blade.
- D. Changing hand grip or body position while cutting can result in blade twist.
- E. Backing unit up to clear blade can lead to twist if not done carefully.

### 4. Materials that require extra attention

- A. Wet lumber
- B. Green lumber (material freshly cut or not kiln dried)
- Pressure treated lumber (material treated with preservatives or anti-rot chemicals)

### 5. USE OF DULL OR DIRTY BLADES

Dull blades cause increased loading of the saw. To compensate, an operator will usually push harder which further loads the unit and promotes twisting of the blade in the kerf. Worn blades may also have insufficient body clearance which increases the chance of binding and increased loading.

### 6. LIFTING THE SAW WHEN MAKING BEVEL CUTS

Bevel cuts require special operator attention to proper cutting techniques — especially guidance of the saw. Both blade angle to the shoe and greater blade surface in the material increase the chance for binding and misalignment (twist) to

### 7. RESTARTING A CUT WITH THE BLADE TEETH JAMMED AGAINST THE MATERIAL

The saw should be brought up to full operating speed before starting a cut or restarting a cut after the unit has been stopped with the blade in the kerf. Failure to do so can cause stalling and kickback.

# CUTTING

Support the work so that the cut will be on your right. Place the wider portion of the saw shoe on that part of the work piece which is solidly supported, not on the section that will fall off when the cut is made. As examples, Figure E14 illustrates the CORRECT way to cut off the end of a board, and Figure E15 the WRONG way. Always clamp work. Don't try to hold short pieces by hand! Remember to support cantilevered and overhanging material. Use caution when sawing material from below.

Be sure saw is up to full speed before blade contacts material to be cut. Starting saw with blade against material to be cut or pushed forward into kerf can result in kickback.

Push the saw forward at a speed which allows the blade to cut without labouring. Hardness and toughness can vary even in the same piece of material, and knotting or damp sections can put a heavy load on the saw. When this happens, push the saw more slowly, but hard enough to keep it working without much decrease in speed.

Forcing the saw can cause rough cuts, inaccuracy, kickback and over-heating of the motor

Should your cut begin to go off the line, don't try to force it back on. Release the switch and allow blade to come to a complete stop. Then you can withdraw the saw, sight anew, and start a new cut slightly inside the wrong one. In any event, withdraw

the saw if you must shift the cut. Forcing a correction inside the cut can stall the saw and lead to kickback. IF SAW STALLS, RELEASE THE TRIGGER AND BACK THE SAW UNTIL IT IS LOOSE. BE SURE BLADE IS STRAIGHT IN THE CUT AND CLEAR OFF THE EDGE BEFORE RESTARTING.

As you finish a cut, release the trigger and allow the blade to stop before lifting the saw from the work. As you lift the saw, the spring-tensioned telescoping guard will automatically close under the blade. Remember the blade is exposed until this occurs, never reach under the work for any reason whatsoever. When you have to retract the telescoping guard manually (as is necessary for starting pocket cuts) always use the retracting lever.

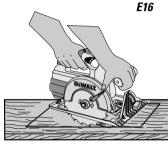
**NOTE:** When cutting thin strips, be careful to ensure that small cutoff pieces don't hang up on inside of lower quard.

When ripping (cutting with the grain) the use of a rip fence is recommended.

### **POCKET CUTTING**

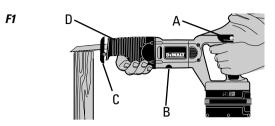
## DISCONNECT TOOL FROM BATTERY PACK WHEN MAKING THIS OR ANY OTHER ADJUSTMENT.

Adjust saw shoe so blade cuts at desired depth. Tilt saw forward and rest front of the shoe on material to be cut. Using the retracting lever, retract blade guard to an open position. Lower rear of shoe until blade teeth almost touch cutting line. Now release the blade guard (its contact with the work will keep it in position to open freely as you start the cut) (Figure E16). Start the motor



and gradually lower the saw until its shoe rests flat on the material to be cut. Advance saw along the cutting line until cut is completed. Release trigger and allow blade to stop completely before withdrawing the blade from the material. When starting each new cut, repeat as above. **Never tie the blade guard in a raised position.** 

# **SECTION F: RECIPROCATING SAW DW008**



# **ADDITIONAL SPECIFIC SAFETY RULES**

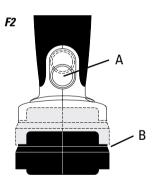
 Hold tool by insulated gripping surface when performing an operation where cutting tool may contact hidden wiring.

Contact with a "LIVE" wire will make exposed metal parts of the tool "LIVE" and may shock the operator.

- ⚠ Caution: Some wood contains preservatives such as copper chromium
  arsenate (CCA) which can be toxic. When sanding, drilling or cutting these
  materials, extra care should be taken to avoid inhalation and minimise skin
  contact.
- ⚠ Warning: use of this tool can generate dust containing chemicals known to cause cancer, birth defects or other reproductive harm. Use appropriate respiratory protection.

# INSTALLING & REMOVING THE BATTERY PACK

**Note:** Make sure your battery pack is fully charged. To install the battery pack into the tool handle, align the base of the tool with the notch inside the tool's handle and slide the battery pack firmly into the handle until you hear the lock snap into place as shown in Fig. F2.



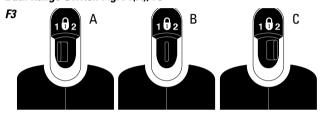
**To remove the battery pack from the tool**, press the release button Fig. F2(A) and firmly pull the battery Fig. F2(B) out of the tool handle. Insert it into the charger as described in the charger section of the manual.

# MOTOR

Your DEWALT tool is powered by a DeWalt-built motor. Be sure your power supply agrees with the nameplate markings.

Voltage decrease of more than 10% will cause loss of power and overheating. All DEWALT tools are factory tested: if this tool does not operate, check your battery pack.

# Dual Range Switch Fig. F1(A), F3



This dual range saw offers a choice of speeds for greatly improved cutting rates in various metals and a lock position. Note that the High Range (2) setting is more efficient in softer materials such as wood, while the Low Range (1) setting is best for cutting metals.

- A **Low Range** Position 1 for cutting metal sheet, pipe, conduit, etc.
- B Trigger Lock Middle Position prevents tool from operating
- C High Range Position 2 for cutting wood, plastic, composition boards and other similar materials.

### Blade Storage Fig. F1(B), F4

A slot has been provided for storage of a spare blade. Be sure that the teeth are facing in, as shown, when inserting the blade. Press the blade all the way in, so that the jaws will catch and hold the blade.

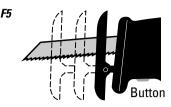




# Adjustable Shoe Fig. F1(C), F5

# 

The shoe will adjust to limit the depth of cut. Hold the saw with the underside facing up. Push the button on the hand grip and slide the shoe out to one of the three settings and release the button.



This adjustment also allows you to use different areas of the blade – extending blade life.

# Blade Clamp Release Lever Fig. F1(D), F6(A)

# **⚠** Caution: Lock Trigger Switch and Remove Battery.

#### To install the blade into saw:

- 1. Open blade clamp release lever up.
- 2. Insert blade shank from the front.
- Close blade clamp release lever down.

### To remove blade from saw:

- 1. Open up blade clamp release lever.
- Remove blade.

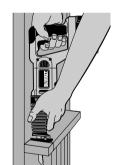
# **OPERATION**

⚠ **Caution:** Always wear protection while operating this or any other power tool.

### Flush-To Cutting Fig. F7

The compact design of the motor housing and spindle housing permits extremely close cutting to floors, corners and other difficult areas.

⚠ Caution: When sawing into walls, floors or wherever "live" electrical wires may be encountered, DO NOT TOUCH ANY FRONT METAL PARTS OF THE TOOL! Hold the tool only by the plastic or rubber handle and housing to prevent electrical shock if you saw into a "live"

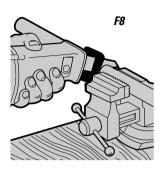


**F7** 

wire.

# Metal Cutting Fig. F8

This unit has different metal cutting capabilities depending upon the type of blade used and the metal to be cut. Use a finer blade for ferrous metals and a course blade for non-ferrous materials. In thin gauge sheet metals it is best to clamp wood to both sides of sheet. This will ensure a clean cut without excess vibration or tearing of metal. Always remember not to force cutting blades as this reduces blade life and causes costly blade breakage. To prolong blade life, use other areas of the blade by adjusting the shoe position. (See Adjustable Shoe).

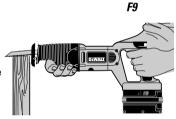


**Note:** It is generally recommended that when cutting metals you should spread a thin film of oil or other coolant along the line ahead of the saw cut for easier operation and longer blade life.

# Wood Cutting Fig. F9

Before cutting any type of wood, be sure it is firmly anchored or clamped to prevent slipping. Place blade lightly against

slipping. Place blade lightly against work to be cut, switch on saw motor and allow it to obtain maximum speed before applying pressure. Always hold saw firmly against the material being cut. This will prevent the saw from jumping or vibrating and minimise blade breakage.



# Pocket Cutting (Wood Only) Fig. F10

The initial step in pocket cutting is to measure the surface to be cut and mark clearly with a pencil, chalk or scriber. Insert pocket cutting blade in blade clamp and tighten blade clamp securely. Next, tip the saw backward until the back edge of the shoe is resting on the work surface. Now switch motor on, always permitting blade to attain maximum speed. Grip the handle steadily and begin a slow, deliberate upward swing with the handle of the saw. Blade will begin to feed into material. Always be sure blade is completely through

material before continuing with pocket cut.

**Note**: In areas where blade visibility is limited, use the edge of the saw shoe as a guide. Lines for any given cut should be extended beyond edge of cut to be made.

# **MAINTENANCE**

#### Lubrication

Your tool was properly lubricated before leaving the factory. In from two to six months, depending on use, take or send your tool to a Service Centre, or authorised service station, for a complete cleaning, inspection and lubrication. Tools used constantly on production jobs will need relubrication more often. Also, tools "out of service" for long periods should be relubricated before being put back to work.

F10

Contact 1800 654 155 for Service Centre locations.

# **ACCESSORIES**

Recommended accessories for use with your tool are available at extra cost from your local service centre.

⚠ **Caution:** The use of any non-recommended accessory may be hazardous. A complete listing of service centres is included with your tool. If you need assistance in locating any accessory, please contact:

Australia: 1800 816 900 N.Z.: 09 579 7600.



# SECTION G: AFTER SALES SERVICE

# **DEWALT AFTER SALES SERVICE**

All DEWALT power tools are thoroughly tested before leaving the factory. However, if the power tool needs repair, please contact your dealer or take it to your nearest DEWALT Service Centre.

There is a Service Centre in every capital city. For service, repair or parts call: Australia 1800 654 155, New Zealand 09 579 7600.

#### Accessories

Recommended accessories for use with your tool are available at extra cost from your local service centre.

For accessories assistance call: Australia 1800 816 900, New Zealand 09 579 7600

▲ CAUTION: The use of any non-recommended accessory may be hazardous.

# **MAINTENANCE**

# **Cleaning and Lubrication**

Use only mild soap and a damp cloth to clean the tool. Many household cleaners contain chemicals which could seriously damage plastic. Also, do not use gasoline, turpentine, lacquer or paint thinner, dry cleaning fluids or similar products. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

Self lubricating ball and roller bearings are used in the tool and relubrication is not required. However, it is recommended that, once a year, you take or send the tool to a service centre for a thorough cleaning, inspection and lubrication of the gear case.

# **GUARANTEE**

Applicable to hand held power tools.

### Full One Year Warranty

DEWALT heavy duty industrial tools are warranted for one year from date of purchase. We will repair, without charge, any defects due to faulty materials or workmanship. Please return the complete unit, transportation prepaid, to any DEWALT Service Centre, or any Authorised Service Centre.

This warranty does not apply to:

- Accessories
- Damage caused where repairs have been made or attempted by others
- Damage due to misuse, neglect, wear and tear, alteration or modification.

### Free One Year Service Contract

In addition to a full one year warranty, every DEWALT tool is backed with a Free One Year Service Contract. We will provide free labour on all repairs and preventative maintenance during the first year after purchase. Proof of purchase date is required. Contact your Service Centre on 1800 654 155.

# 30 Day No Risk Satisfaction Guarantee

If you are dissatisfied with any DEWALT power tool, for any reason, simply return it to the point of purchase with your sales receipt within 30 days for a replacement unit or a full refund.

# Information Hotline

When you need further information on a DEWALT product please phone:

Australia: 1800 816 900

New Zealand: 09 579 7600

# **Unwanted Tools and the Environment**

Take your old tool to an authorised DEWALT Service Centre where it will be disposed of in an environmentally safe way.

### NOTES:

- DEWALT reserves the right to change or upgrade product specifications or standard equipment at any time without notice.
- · Standard equipment and accessories may vary by country.
- Product specifications may vary by country.
- Complete product range may not be available in all countries. See your local DEWALT dealer for range availability.

Battery					Charg	ers/Charge	Time					
Model #	Volts	DW9106	DW9118	DW9107	DW9108	DW9108220	DW9116	DW9116220	DW9109	DW9117	DW911	DW0245
DW0240	24	Х	х	х	х	Х	х	Х	Х	Х	Х	60
DW9096	18	Х	х	х	60	60	60	60	60	22	60	Х
DW9095	18	Х	х	х	45	45	45	45	45	15	45	Х
DW9098	18	Х	Х	Х	30	30	30	30	30	12	30	Х
DW9091	14.4	60	90	45	45	45	45	45	45	15	45	Х
DW9094	14.4	42	60	30	30	30	30	30	30	12	30	Х
DW9051	13.2	43	Х	Х	х	Х	Х	Х	Х	х	Х	Х
DW9071	12	60	90	45	45	45	45	45	45	15	45	Х
DW9072	12	42	60	30	30	30	30	30	30	12	30	Х
DW9050	12	43	х	х	х	Х	х	Х	х	Х	Х	Х
DW9061	9.6	60	90	45	45	45	45	45	45	15	45	Х
DW9062	9.6	42	60	30	30	30	30	30	30	12	30	Х
DW9048	9.6	40	х	Х	х	Х	х	Х	х	Х	Х	Х
DW9057	7.2	42	60	30	30	30	30	30	30	12	30	Х
DW9046	7.2	40	х	Х	х	Х	х	Х	Х	Х	Х	Х

Note: This instruction manual is applicable for the following subcodes: –XE

**DEWALT Industrial Tool Company Part No. 613120-00**